

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|-------|------|---|--|------------------|---------|------------------|
| S1 | 2 | ("6008703").PN. | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/07/22 10:38 |
| S2 | 2 | hein.in. and perrott.in. | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/10/26 13:11 |
| S3 | 2 | ("5036298").PN. | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/10/26 15:26 |
| S4 | 1527 | (clock near delay\$4) and pll | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/10/26 15:26 |
| S5 | 436 | (clock near delay\$4) and pll and vco and filter | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/10/26 15:27 |
| S6 | 366 | (clock near delay\$4) and pll and vco and filter and (phase with detect\$4) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/10/26 15:27 |
| S7 | 270 | ((clock near delay\$4) and pll and vco and filter and (phase with detect\$4)) and (ram or rom or fifo or memory or register or storage) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/26 15:28 |
| S8 | 181 | ((clock near delay\$4) and pll and vco and filter and (phase with detect\$4)) and ((ram or rom or fifo or memory or register or storage) with data) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/26 15:28 |
| S9 | 104 | ((clock near delay\$4) and pll and vco and filter and (phase with detect\$4)) and (((ram or rom or fifo or memory or register or storage) with data) same phase) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/26 15:29 |
| S10 | 49 | ((((clock near delay\$4) and pll and vco and filter and (phase with detect\$4)) and (((ram or rom or fifo or memory or register or storage) with data) same phase)) and ((vco or oscillat\$4) same (delay\$4 with clock)) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/26 16:38 |

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|-----|-------|---|--|----|----|------------------|
| S11 | 16549 | data with phase with detect\$4 | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/26 16:39 |
| S12 | 3042 | pll and (data with phase with detect\$4) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/26 16:39 |
| S13 | 756 | (pll and (data with phase with detect\$4)) and (clock with delay\$4) and filter | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/26 16:39 |
| S14 | 266 | (pll and (data with phase with detect\$4)) and (clock with delay\$4 with control\$4) and filter | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/26 16:40 |
| S15 | 128 | (pll and (data with phase with detect\$4)) and ((clock with delay\$4 with control\$4) same (phase with detect\$4)) and filter | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/26 16:40 |
| S16 | 70 | (pll and (data with phase with detect\$4)) and ((clock with delay\$4 with control\$4) same (phase with detect\$4)) and (delay\$4 with filter) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/26 16:45 |
| S17 | 40135 | clock near5 delay\$4 | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/26 16:45 |
| S18 | 4600 | pll and (clock near5 delay\$4) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/26 16:45 |
| S19 | 1593 | pll same (clock near5 delay\$4) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/26 16:45 |
| S20 | 73 | (pll same (clock near5 delay\$4)) and ((clock with delay\$4 with control\$4) same (phase with detect\$4)) and (delay\$4 with filter) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/26 16:46 |
| S21 | 30249 | clock near3 delay\$4 | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/26 16:45 |
| S22 | 150 | (clock near3 delay\$4) and ((clock with delay\$4 with control\$4) same (phase with detect\$4)) and (delay\$4 with filter) and pll | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/26 16:46 |

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| S23 | 39 | (clock near3 delay\$4) and ((clock with delay\$4 with control\$4) same (phase with detect\$4 with data)) and (delay\$4 with filter) and pll | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/26 20:02 |
| S24 | 2687 | (clock with delay\$4) and (clock with jitter\$4) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/26 20:02 |
| S25 | 1186 | (clock with delay\$4) and (clock with jitter\$4) and pll | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/26 20:02 |
| S26 | 1297 | (clock with delay\$4) and (clock with jitter\$4) and (pll or dll) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/26 20:03 |
| S27 | 1032 | (clock near4 delay\$4) and (clock with jitter\$4) and (pll or dll) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/26 20:03 |
| S28 | 937 | (clock near3 delay\$4) and (clock with jitter\$4) and (pll or dll) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/26 20:03 |
| S29 | 793 | (clock near2 delay\$4) and (clock with jitter\$4) and (pll or dll) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/26 20:03 |
| S30 | 228 | ((clock near2 delay\$4) and (clock with jitter\$4) and (pll or dll)) and vco and filter | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/26 20:03 |
| S31 | 145 | (phase with data) and (((clock near2 delay\$4) and (clock with jitter\$4) and (pll or dll)) and vco and filter) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/26 20:04 |
| S32 | 103 | ((phase with data) and (((clock near2 delay\$4) and (clock with jitter\$4) and (pll or dll)) and vco and filter)) and (delay\$4 with control\$4) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/26 20:04 |
| S33 | 39 | ((phase with data) and (((clock near2 delay\$4) and (clock with jitter\$4) and (pll or dll)) and vco and filter)) and ((delay\$4 with control\$4) same vco) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/27 10:13 |
| S34 | 189319 | (phase or frequency) near2 (detect\$3 or compar\$4) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/27 10:14 |

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| S35 | 24318 | oscillator\$1 same delay\$3 | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/27 10:14 |
| S36 | 3753 | ((phase or frequency) near2 (detect\$3 or compar\$4)) same (oscillator\$1 same delay\$3) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/27 10:14 |
| S37 | 195930 | control with phase | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/27 10:15 |
| S38 | 1361 | ((phase or frequency) near2 (detect\$3 or compar\$4)) same (oscillator\$1 same delay\$3)) same (control with phase) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/27 10:15 |
| S39 | 11473 | control with phase with delay | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/27 10:15 |
| S40 | 12994 | control with phase with delay\$3 | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/27 10:15 |
| S41 | 777 | ((phase or frequency) near2 (detect\$3 or compar\$4)) same (oscillator\$1 same delay\$3)) same (control with phase with delay\$3) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/27 13:23 |
| S42 | 304 | ((phase or frequency) near2 (detect\$3 or compar\$4)) same (oscillator\$1 same delay\$3)) same (control with phase with delay\$3)) and vco | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/27 10:16 |
| S43 | 168 | ((phase or frequency) near2 (detect\$3 or compar\$4)) same (oscillator\$1 same delay\$3)) same (control with phase with delay\$3)) and vco) and (clock with delay\$3) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/27 10:30 |
| S44 | 4 | ("5113152" "5202906" "5281863" "6404291").PN. | USPAT | OR | OFF | 2004/10/27 10:28 |
| S45 | 3 | "6542038".URPN. | USPAT | OR | OFF | 2004/10/27 10:30 |
| S46 | 114 | nishimura.in. and pll | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/27 10:30 |
| S47 | 10 | nishimura.in. and pll and matsushita.as. | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/27 13:22 |

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|-----|-------|--|--|----|----|------------------|
| S48 | 237 | pll and (delay near filter\$4) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/27 13:22 |
| S49 | 263 | pll and (delay\$3 near filter\$4) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/27 13:22 |
| S50 | 673 | pll and (delay\$3 near2 filter\$4) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/27 13:23 |
| S51 | 777 | ((((phase or frequency) near2 (detect\$3 or compar\$4)) same (oscillator\$1 same delay\$3)) same (control with phase with delay\$3) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/27 13:23 |
| S52 | 16 | (pll and (delay\$3 near2 filter\$4)) and (((phase or frequency) near2 (detect\$3 or compar\$4)) same (oscillator\$1 same delay\$3)) same (control with phase with delay\$3)) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/27 13:32 |
| S53 | 10598 | ((phase near2 (detect\$3 or compar\$5)) with control\$4) and pll | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/27 13:33 |
| S54 | 8622 | ((((phase near2 (detect\$3 or compar\$5)) with control\$4) same (vco or oscillat\$4)) and pll | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/27 13:34 |
| S55 | 4807 | ((((phase near2 (detect\$3 or compar\$5)) with control\$4 with filter) same (vco or oscillat\$4)) and pll | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/27 13:35 |
| S56 | 970 | ((((phase near2 (detect\$3 or compar\$5)) with control\$4 with filter with clock) same (vco or oscillat\$4)) and pll | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/27 13:35 |
| S57 | 87 | ((((phase near2 (detect\$3 or compar\$5)) with control\$4 with filter with (delay\$4 with clock)) same (vco or oscillat\$4)) and pll | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/27 14:12 |
| S58 | 722 | matsushita.as. and pll and (phase near comparator) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/27 14:12 |
| S59 | 22 | (matsushita.as. and pll and (phase near comparator)) and (delay near element) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/27 15:03 |

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| S60 | 1308 | delay with (control near2 signal) with (phase near2 (detect\$3 or compar\$6)) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/27 15:04 |
| S61 | 326 | (delay with (control near2 signal) with (phase near2 (detect\$3 or compar\$6))) and (vco or oscillat\$4) and pll | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/27 15:04 |
| S62 | 252 | ((delay with (control near2 signal) with (phase near2 (detect\$3 or compar\$6))) and (vco or oscillat\$4) and pll) and (delay\$3 with clock) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/27 15:04 |
| S63 | 105 | ((((delay with (control near2 signal) with (phase near2 (detect\$3 or compar\$6))) and (vco or oscillat\$4) and pll) and (delay\$3 with clock)) and (delay with filter) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/28 11:07 |
| S64 | 409 | delay\$4 near4 (clock and (oscillat\$3 or vco) and (phase near2 (detect\$3 or compar\$5))) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/28 11:08 |
| S65 | 242 | pll and (delay\$4 near4 (clock and (oscillat\$3 or vco) and (phase near2 (detect\$3 or compar\$5)))) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/28 11:08 |
| S66 | 187 | (pll and (delay\$4 near4 (clock and (oscillat\$3 or vco) and (phase near2 (detect\$3 or compar\$5)))) and filter | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/28 15:41 |
| S67 | 187 | (pll and (delay\$4 near4 (clock and (oscillat\$3 or vco) and (phase near2 (detect\$3 or compar\$5)))) and filter | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/28 15:41 |
| S68 | 15088 | data near recover\$4 | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/28 15:51 |
| S69 | 26 | ((pll and (delay\$4 near4 (clock and (oscillat\$3 or vco) and (phase near2 (detect\$3 or compar\$5)))) and filter) and (data near recover\$4) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/28 15:44 |
| S70 | 0 | fifo and (((pll and (delay\$4 near4 (clock and (oscillat\$3 or vco) and (phase near2 (detect\$3 or compar\$5)))) and filter) and (data near recover\$4)) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/28 15:45 |

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| S71 | 1216 | fifo and (data near recover\$4) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/28 15:45 |
| S72 | 289 | (fifo and (data near recover\$4)) and pll | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/28 15:45 |
| S73 | 18 | ((fifo and (data near recover\$4)) and pll) and (clock near delay\$3) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/28 15:45 |
| S74 | 4 | ((data near recover\$4) same fifo) and pll and (phase near (detect\$3 or comparat\$3)) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/10/28 15:52 |
| S75 | 15 | (US-5036298-\$ or US-6718473-\$ or US-6483871-\$ or US-6127865-\$ or US-6028903-\$ or US-6414528-\$ or US-5347232-\$ or US-5212601-\$ or US-6542038-\$ or US-6356158-\$ or US-6198415-\$ or US-6259293-\$ or US-6041089-\$ or US-6542040-\$ or US-6396888-\$).did. | USPAT | OR | OFF | 2004/10/28 15:54 |
| S76 | 13 | data and ((US-5036298-\$ or US-6718473-\$ or US-6483871-\$ or US-6127865-\$ or US-6028903-\$ or US-6414528-\$ or US-5347232-\$ or US-5212601-\$ or US-6542038-\$ or US-6356158-\$ or US-6198415-\$ or US-6259293-\$ or US-6041089-\$ or US-6542040-\$ or US-6396888-\$). did.) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/10/28 15:54 |
| S77 | 11 | ((data near (recover\$3 or detect\$3 or sync\$12)) or (data same pll)) and ((US-5036298-\$ or US-6718473-\$ or US-6483871-\$ or US-6127865-\$ or US-6028903-\$ or US-6414528-\$ or US-5347232-\$ or US-5212601-\$ or US-6542038-\$ or US-6356158-\$ or US-6198415-\$ or US-6259293-\$ or US-6041089-\$ or US-6542040-\$ or US-6396888-\$). did.) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/10/28 16:12 |
| S78 | 2 | ("5036298").PN. | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/10/28 16:12 |

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| S79 | 2 | ((("5036298").PN.) and zero | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/10/28 16:12 |
| S80 | 45 | (clock near delay\$4) and ((phase near (detect\$3 or comparat\$4)) same (retim\$4) same data) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/10/29 18:28 |
| S81 | 533 | 375/327.ccls. | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/10/29 18:29 |
| S82 | 168 | 375/327.ccls. and pll and (phase near (detect\$4 or comparat\$4)) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/10/29 18:29 |
| S83 | 7 | (375/327.ccls. and pll and (phase near (detect\$4 or comparat\$4))) and (clock near delay\$4) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/10/29 18:30 |
| S84 | 70599 | phase near detect\$4 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/29 15:26 |
| S85 | 2504 | vco with delay\$4 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/29 15:27 |
| S86 | 1172 | S84 and S85 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/29 15:27 |
| S87 | 23 | S86 and (delay\$4 near filter\$4) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/29 15:36 |
| S88 | 245006 | (phase frequency) near3 (detect\$4 comparat\$4) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/29 15:36 |

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| S89 | 38782 | (oscillator vco) same delay\$4 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/29 15:37 |
| S90 | 6729 | S88 same S89 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/29 15:37 |
| S91 | 19880 | (oscillator vco) with delay\$4 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/29 15:37 |
| S92 | 3296 | S88 same S91 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/29 15:37 |
| S93 | 1625 | S92 and (delay\$4 same clock) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/29 15:37 |
| S94 | 1385 | S92 and (delay\$4 with clock) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/29 15:37 |
| S95 | 785 | S94 and (delay\$4 same filter\$4) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/29 15:38 |
| S96 | 549 | S94 and (delay\$4 with filter\$4) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/29 15:44 |

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| S97 | 12998 | S84 same clock | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/29 15:39 |
| S98 | 312 | S96 and S97 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/29 15:39 |
| S99 | 1585 | S84 same (delay\$4 with filter\$4) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/29 15:45 |
| S10 0 | 207 | S98 and S99 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/29 15:46 |
| S10 1 | 3621 | S88 same (delay\$4 with filter\$4) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/29 15:45 |
| S10 2 | 1585 | S99 same S101 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/29 15:45 |
| S10 3 | 158 | S98 and S99 | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/29 15:46 |
| S10 4 | 6 | ("4510461" "4947382" "5374904" "5404250" "5475344" "5717362").PN. | US-PGPUB; USPAT; USOCR | OR | ON | 2005/06/29 15:51 |
| S10 5 | 2 | ("6542040").URPN. | USPAT | OR | ON | 2005/06/29 15:51 |
| S10 6 | 751 | pll and (clock with delay\$4 with filter\$4) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/08 18:52 |

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| S10 7 | 343 | pll and (clock with delay\$4 with filter\$4 with control\$4) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/08 18:53 |
| S10 8 | 298 | S107 and (phase near (detect\$4 compar\$4)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/08 18:57 |
| S10 9 | 14 | S108 and (delay\$4 near filter\$4) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/08 18:56 |
| S11 0 | 2661 | pll and (delay\$4 with control with clock) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/08 18:56 |
| S11 1 | 1196 | S110 and (clock near delay\$4) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/08 18:56 |
| S11 2 | 762 | S111 and (phase near (detect\$4 compar\$4)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/08 18:57 |
| S11 3 | 22 | (delay\$4 near filter\$4) and S112 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/08 18:57 |
| S11 4 | 110 | vco with (clock near delay\$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 10:59 |

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| S11 5 | 87 | pll and (clock near delay\$3 near control\$4) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 11:07 |
| S11 6 | 595 | pll same (delay near control\$4) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 11:07 |
| S11 7 | 422 | S116 same phase | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 11:08 |
| S11 8 | 331 | S117 and (oscillat\$4 vco nco) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 11:08 |
| S11 9 | 225 | S117 and (oscillat\$4 vco nco) | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 11:08 |
| S12 0 | 6 | ("5019785" "5339278" "5574757" "5596300" "5638410" "5648964").PN. | US-PGPUB; USPAT; USOCR | OR | ON | 2005/07/22 11:26 |
| S12 1 | 4 | ("6310498").URPN. | USPAT | OR | ON | 2005/07/22 11:41 |
| S12 2 | 2 | ("5389898" "5889436").PN. | US-PGPUB; USPAT; USOCR | OR | ON | 2005/07/22 11:53 |
| S12 3 | 90 | (phase near (error difference detect\$4)) same vco same (control\$4 near delay\$4) | US-PGPUB; USPAT; USOCR | OR | ON | 2005/07/22 11:55 |
| S12 4 | 80 | (phase near (error difference detect\$4)) same vco same (control\$4 near delay\$4) | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 11:59 |
| S12 5 | 37 | (phase near (error difference detect\$4)) with (control\$4 near delay\$4) same vco | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 12:00 |

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| S12 6 | 37 | ((phase near (error difference detect\$4)) with (control\$4 near delay\$4)) same vco | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 12:03 |
| S12 7 | 27 | (voltage near control\$4 near delay\$4) with (phase near shift) | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 13:01 |
| S12 8 | 0 | vco same S127 | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 12:03 |
| S12 9 | 6 | vco and S127 | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 12:03 |
| S13 0 | 177031 | (phase frequency) near2 (detect\$4 comparat\$3) | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 13:01 |
| S13 1 | 50616 | oscillat\$4 same delay\$4 | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 13:03 |
| S13 2 | 5598 | S130 same S131 | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 13:35 |
| S13 3 | 815 | oscillat\$4 same (clock near delay\$4) | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 13:04 |
| S13 4 | 5598 | S130 same S132 | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 13:04 |
| S13 5 | 160 | S130 same S133 | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 13:30 |

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| S13 6 | 2 | ("5856762").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/07/22 13:34 |
| S13 7 | 2463 | 327/149,156,158,161.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 15:57 |
| S13 8 | 177031 | (phase frequency) near2 (detect\$4 comparat\$3) | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 13:35 |
| S13 9 | 50616 | oscillat\$4 same delay\$4 | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 13:35 |
| S14 0 | 5598 | S138 same S139 | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 13:35 |
| S14 1 | 319 | S137 and S140 | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 13:35 |
| S14 2 | 8 | ("5347234" "5475344" "5706218" "5717362" "5864258" "6094103" "6104253" "6188291").PN. | US-PGPUB; USPAT; USOCR | OR | ON | 2005/07/22 13:47 |
| S14 3 | 0 | ("6683504").URPN. | USPAT | OR | ON | 2005/07/22 13:48 |
| S14 4 | 5 | ("4409564" "4472685" "4697156" "5495206" "5907253").PN. | US-PGPUB; USPAT; USOCR | OR | ON | 2005/07/22 14:22 |
| S14 5 | 5 | ("6359950").URPN. | USPAT | OR | ON | 2005/07/22 14:23 |
| S14 6 | 3 | ("5459756" "5481573" "5675620").PN. | US-PGPUB; USPAT; USOCR | OR | ON | 2005/07/22 15:46 |
| S14 7 | 1 | ("6353648").URPN. | USPAT | OR | ON | 2005/07/22 15:47 |
| S14 8 | 8565 | (divid\$4 delay) same pll | USPAT | OR | ON | 2005/07/22 15:48 |

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| S14 9 | 3278 | (divid\$4 delay) same pll same vco | USPAT | OR | ON | 2005/07/22 15:48 |
| S15 0 | 2224 | (divid\$4 delay) same pll same vco same filter\$4 | USPAT | OR | ON | 2005/07/22 15:48 |
| S15 1 | 1764 | (divid\$4 delay) same pll same vco same filter\$4 same (phase near (detect\$4 compar\$4)) | USPAT | OR | ON | 2005/07/22 16:09 |
| S15 2 | 385 | 375/130-377.ccls. and S151 | USPAT | OR | ON | 2005/07/22 15:57 |
| S15 3 | 2463 | 327/149,156,158,161.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 15:57 |
| S15 4 | 70 | S152 and S153 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 15:58 |
| S15 5 | 89 | (divid\$4 delay) same pll same vco same filter\$4 and ((phase near (detect\$4 compar\$4)) with (memory ram rom storage fifo)) | USPAT | OR | ON | 2005/07/22 19:00 |
| S15 6 | 55 | ((phase near (detect\$4 compar\$4)) with fifo) | USPAT | OR | ON | 2005/07/22 16:18 |
| S15 7 | 15 | ("4941156" "5142555" "5410723" "5493243" "5602882" "5604741" "5793824" "5844436" "5956748" "6081844" "6118835" "6226698" "6278718" "6421770" "6463111").PN. | US-PGPUB; USPAT; USOCR | OR | ON | 2005/07/22 16:34 |
| S15 8 | 526 | (fifo with (read and write)) and (phase near2 (detect\$4 comparat\$4)) | US-PGPUB; USPAT; USOCR | OR | ON | 2005/07/22 16:34 |
| S15 9 | 322 | (fifo with (read and write)) and (phase near2 (detect\$4 comparat\$4)) | USPAT | OR | ON | 2005/07/22 16:34 |
| S16 0 | 53839 | (fifo with (read and write)) dame (phase near2 (detect\$4 comparat\$4)) | USPAT | OR | ON | 2005/07/22 16:35 |
| S16 1 | 22 | (fifo with (read and write)) same (phase near2 (detect\$4 comparat\$4)) | USPAT | OR | ON | 2005/07/22 16:35 |

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| S16 2 | 2927 | (delay\$4 divid\$4) with filter with pll | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 17:35 |
| S16 3 | 1510 | (delay\$4 divid\$4) with filter with pll with vco | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 17:34 |
| S16 4 | 177031 | (phase frequency) near2 (detect\$4 comparat\$3) | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 17:34 |
| S16 5 | 965 | S164 with S163 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 17:34 |
| S16 6 | 965 | S164 with S163 | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 17:35 |
| S16 7 | 688 | ((delay\$4 divid\$4) near8 filter) and S166 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 17:35 |
| S16 8 | 688 | ((delay\$4 divid\$4) near8 filter) and S166 | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 17:37 |
| S16 9 | 28539890 | @pd <= "20010326" | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 17:38 |
| S17 0 | 412 | S169 and S168 | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 18:30 |

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| S17 1 | 1360 | nrz with data with clock | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 18:31 |
| S17 2 | 84 | nrz with (data near code\$2) with clock | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 18:32 |
| S17 3 | 243 | (manchester near code) with clock | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 18:54 |
| S17 4 | 76 | birk.in. and phase | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 18:54 |
| S17 5 | 5 | birk.in. and phase and analog.as. | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 18:56 |
| S17 6 | 2 | ("6768358").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/07/22 18:56 |
| S17 7 | 9 | ("5606293" "5623234" "5774701" "5963068" "6005904" "6031429" "6118306" "6255882" "6356128").PN. | US-PGPUB; USPAT; USOCR | OR | ON | 2005/07/22 18:56 |
| S17 8 | 2 | (divid\$4 delay) same pll same vco same filter\$4 and ((phase near (detect\$4 compar\$4)) with (fifo)) | USPAT | OR | ON | 2005/07/22 19:02 |
| S17 9 | 4 | (divid\$4 delay) same pll same filter\$4 and ((phase near (detect\$4 compar\$4)) with (fifo)) | USPAT | OR | ON | 2005/07/22 19:00 |
| S18 0 | 9 | (divid\$4 delay) same pll and ((phase near (detect\$4 compar\$4)) with (fifo)) | USPAT | OR | ON | 2005/07/22 19:01 |
| S18 1 | 10 | analog.as. and (phase near comparator) | USPAT | OR | ON | 2005/07/22 19:01 |
| S18 2 | 0 | ("6768358").URPN. | USPAT | OR | ON | 2005/07/22 19:02 |

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| S18 3 | 2035 | (divid\$4 delay) same pll same vco same filter\$4 and ((phase near (detect\$4 compar\$4))) | USPAT | OR | ON | 2005/07/22 19:02 |
| S18 4 | 1764 | (divid\$4 delay) same pll same vco same filter\$4 same ((phase near (detect\$4 compar\$4))) | USPAT | OR | ON | 2005/07/22 19:03 |
| S18 5 | 28539890 | @pd <= "20010326" | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/22 19:03 |
| S18 6 | 1129 | S185 and S184 | USPAT | OR | ON | 2005/07/22 19:03 |
| S18 7 | 36 | S186 and (data near recovery) | USPAT | OR | ON | 2005/07/25 08:13 |
| S18 8 | 2 | ("6118316").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/07/25 08:14 |
| S18 9 | 1 | vco and S188 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/07/25 08:14 |
| S19 0 | 4735 | (frequency near divid\$4) with delay\$4 | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/01/19 14:41 |
| S19 1 | 739 | pll and S190 | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/01/19 14:29 |
| S19 2 | 579 | S191 and (phase near (compar\$5 detect\$4)) | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/01/19 14:35 |
| S19 3 | 20412650 | @ad <= "20010326" | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/01/19 14:41 |

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| S19 4 | 447 | S192 and S193 | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/01/19 14:33 |
| S19 5 | 4228 | (frequency near divid\$4) with delay | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/01/19 14:34 |
| S19 6 | 507 | pll and S195 and (phase near (compar\$5 detect\$4)) | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/01/19 14:35 |
| S19 7 | 383 | S193 and S196 | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/01/19 14:35 |
| S19 8 | 305 | (frequency near divid\$4) near delay\$4 | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/01/19 14:41 |
| S19 9 | 223 | (frequency near divid\$4) near delay | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/01/19 14:41 |
| S20 0 | 152 | S193 and S199 | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/01/19 14:42 |